Appendix A.

ALIGNMENTS

RESULT 1
US-09-146-053-4/c
; Sequence 4, Application US/09146053A
; Patent No. 6399349
; GENERAL INFORMATION:
;   APPLICANT: Ryan, James W.
;   APPLICANT: Sprinkle, Terry Joe Curtis
;   APPLICANT: Venema, Richard C.
;   TITLE OF INVENTION: Human Aminopeptidase P Gene
;   FILE REFERENCE: MCG103
;   CURRENT APPLICATION NUMBER: US/09/146,053A
;   CURRENT FILING DATE: 1998-09-02
;   EARLIER APPLICATION NUMBER: 60/057,854
;   EARLIER FILING DATE: 1997-09-02
;   NUMBER OF SEQ ID NOS: 7
;   SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 4
;   LENGTH: 50000
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-146-053-4

Query Match   100.0%; Score 467; DB 4; Length 50000;
Best Local Similarity 100.0%; Pred. No. 3.1e-223;
Matches 467; Conservative   0; Mismatches   0; Indels   0; Gaps   0;

Qy   1 CAATGTTTGCCTATCCACCTCCCCCAAGCCCTTACCTATGCTGCTGCTAACGCTGCTG   60
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1518 CAATGTTTGCCTATCCACCTCCCCCAAGCCCTTACCTATGCTGCTGCTAACGCTGCTG   1459

Qy   61 CTGCTGCTGCTGCTTAAAGGCTCATGCTTGGAGTGGGACTGGTCGGTGCCCAGAAA   120
          |||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1458 CTGCTGCTGCTGCTTAAAGGCTCATGCTTGGAGTGGGACTGGTCGGTGCCCAGAAA   1399

Qy   121 GTCTCTTCTGCCACTGAGCGCCCCATCAGGGATTGGGCCTTCTTTCCCCCTTCCTTTCTG   180
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1398 GTCTCTTCTGCCACTGAGCGCCCCATCAGGGATTGGGCCTTCTTTCCCCCTTCCTTTCTG   1339

Qy   181 TGTTCCTCCTGCCTCATCGGCCATGGCCATGACCTGCGAGCCAGCCCCGTGGGGAAGGG   240
          |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1338 TGTTCCTCCTGCCTCATCGGCCATGGCCATGACCTGCGAGCCAGCCCCGTGGGGAAGGG   1279

Qy   241 GAGAAAGTGGGGGATGGCTAAGAAAGCTGGAGATAGGGAACAGAAGAGAGGGTAGTGGGTG   300
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1278 GAGAAAGTGGGGGATGGCTAAGAAAGCTGGAGATAGGGAACAGAAGAGAGGGTAGTGGGTG   1219

Qy   301 GGCTAGGGGGGCTGCCTTATTTAAAGTGGTTGTTTATGATTCTTATACTAATTTATACAA   360
          |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1218 GGCTAGGGGGGCTGCCTTATTTAAAGTGGTTGTTTATGATTCTTATACTAATTTATACAA   1159

Qy   361 AGATATTAAGGCCCTGTTCATTAAGAAAATTGTTCCCTTCCCCTGTGTTCAATGTTTGTAA   420
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1158 AGATATTAAGGCCCTGTTCATTAAGAAAATTGTTCCCTTCCCCTGTGTTCAATGTTTGTAA   1099

Qy   421 AGATTGTTCTGTGTAAAATATGTCTTTATAATAAAACAGTTAAAAGCTG   467
          ||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1098 AGATTGTTCTGTGTAAATATGTCTTTATAATAAAACAGTTAAAAGCTG   1052

RESULT 2
US-08-863-639A-31/c
; Sequence 31, Application US/08863639A
; Patent No. 5981185
; GENERAL INFORMATION:
;   APPLICANT: Matson, Robert S.
;   APPLICANT: Coassin, Peter J.
;   APPLICANT: Rampal, Jang B.
;   APPLICANT: ...skey, C. T.

TITLE OF INVENTION: OLIGONUCLEOTIDE REPEAT ARRAYS
NUMBER OF SEQUENCES: 95
CORRESPONDENCE ADDRESS:
  ADDRESSEE: Sheldon & Mak
  STREET: 225 South Lake Avenue, 9th Floor
  CITY: Pasadena
  STATE: CA
  COUNTRY: USA
  ZIP: 91101
COMPUTER READABLE FORM:
  MEDIUM TYPE: Diskette, 3.50 inch, 1.44 Mb storage
  COMPUTER: IBM compatible
  OPERATING SYSTEM: Windows 95
  SOFTWARE: Corel WordPerfect 8 version
CURRENT APPLICATION DATA:
  APPLICATION NUMBER: US/08/863,639A
  FILING DATE: May 28, 1997
  CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
  NAME: Joseph E. Mueth
  REGISTRATION NUMBER: 20,532
  REFERENCE/DOCKET NUMBER: 11859-1
TELECOMMUNICATION INFORMATION:
  TELEPHONE: (626) 796-4000
  TELEFAX: (626) 795-6321
INFORMATION FOR SEQ ID NO: 31:
SEQUENCE CHARACTERISTICS:
  LENGTH: 36 base pairs
  TYPE: nucleic acid
  STRANDEDNESS: single
  TOPOLOGY: linear
  MOLECULE TYPE: Other nucleic acid
US-08-863-639A-31

Query Match   5.4%; Score 25; DB 2; Length 36;
Best Local Similarity 100.0%; Pred. No. 0.0046;
Matches 25; Conservative   0; Mismatches   0; Indels   0; Gaps   0;

Qy   53 CGCTGCTGCTGCGCTGCTGCTGCTGCT   77
          |||||||||||||||||||||||||||
Db   27 CGCTGCTGCTGCTGCTGCTGCTGCTGCT   3

RESULT 3
US-09-091-952A-15
; Sequence 15, Application US/09091952A
; Patent No. 6458532
; GENERAL INFORMATION:
;   APPLICANT: Detera-Wadleigh, Sevilla D.
;   Gershon, Elliot S.
;   Badner, Judith A.
;   Goldin, Lynn R.
;   Berrettini, Wade H.
;   Yoshikawa, Takeo
;   Sanders, Alan R.
;   Esterling, Lisa E.
;   TITLE OF INVENTION: Chromosomal Markers and Diagnostic
;   Tests for Manic-Depressive illness
;   NUMBER OF SEQUENCES: 197
;   CORRESPONDENCE ADDRESS:
;   ADDRESSEE: Townsend and Townsend and Crew LLP
;   STREET: Two Embarcadero Center, Eighth Floor
;   CITY: San Francisco
;   STATE: CA
;   COUNTRY: USA
;   ZIP: 94111-3834
;   COMPUTER READABLE FORM:
;   MEDIUM TYPE: Diskette
;   COMPUTER: IBM Compatible
;   OPERATING SYSTEM: DOS
;   SOFTWARE: FastSEQ for Windows Version 2.0
;   CURRENT APPLICATION DATA:
;   APPLICATION NUMBER: US/09/091,952A